



Columbia/Snake Rivers

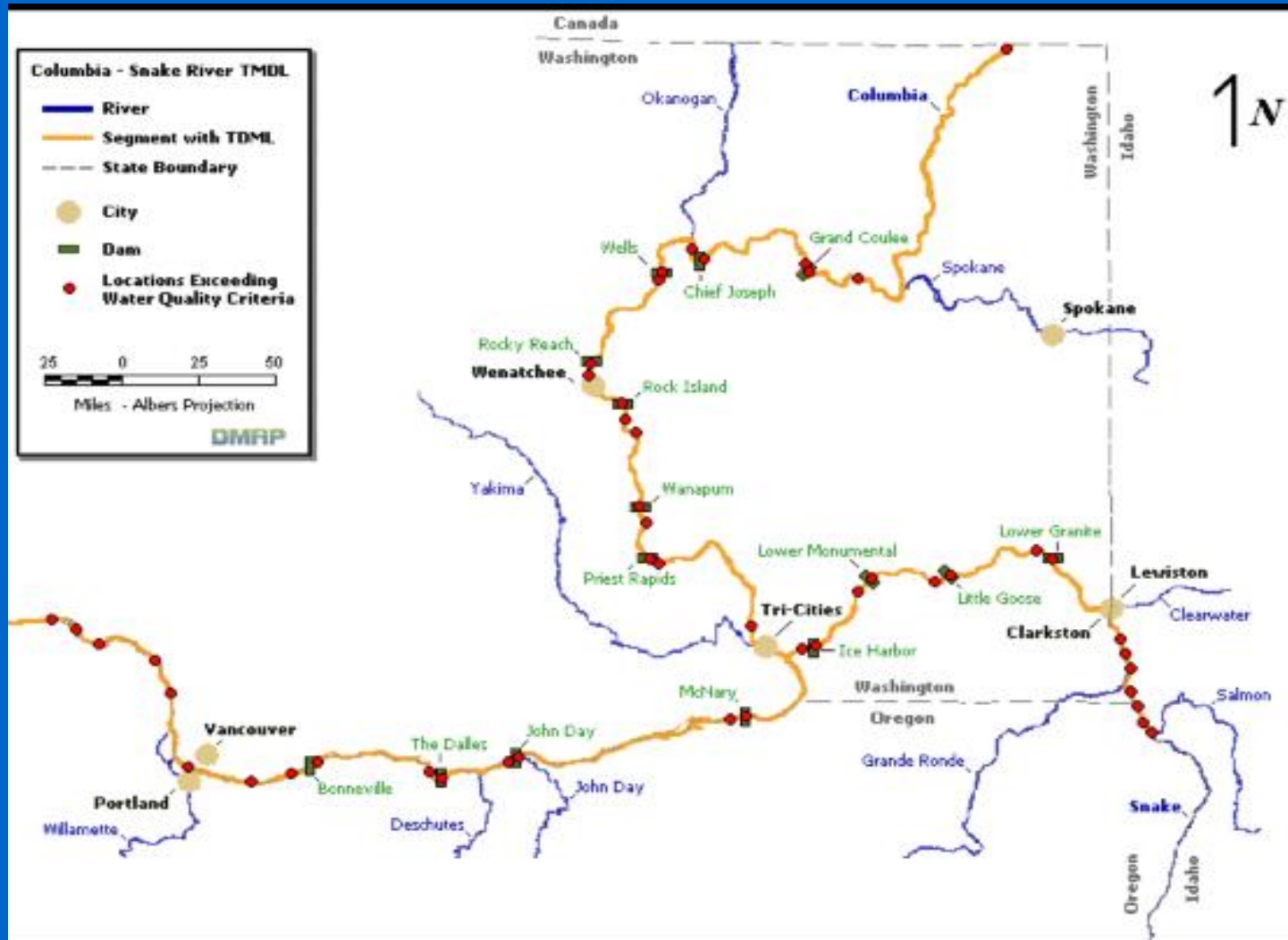


Temperature TMDL

U.S. EPA Region 10



Geographic Scope



Effects on River Users

- Dams are allowed essentially no increase over natural temperature:
- Point Sources with individual permits are generally allowed their existing discharges.
- Point sources with general permits are allowed their existing discharges.

Effects on River Users

- Some future growth is allowed via the group allocations.
- NPS will be addressed in the individual tributary TMDLs as they are developed.

Dams VS Point Sources

- Why no allocation for dams and full allocations for point sources?
 - Dams have much greater impacts on temperature than the point sources;
 - Limiting the point sources would not benefit the dams.

Potential Effect of this TMDL on Dams

- Varies with the effect of the dams on temperature.
- Three fairly distinct groups of dams.

Potential Effect of this TMDL on Dams

Dams that clearly increase temperature by more than a degree Centigrade:

Grand Coulee

John Day

Lower Granite

Little Goose

Lower Monumental

Ice Harbor

Potential Effect of this TMDL on Dams

Dams with highly variable impacts up to
a degree Centigrade:

Chief Joseph

Wanapum

Potential Effect of this TMDL on Dams

Dams with highly variable impacts from
no impact to 1/2 a degree Centigrade:

Wells

Rocky Reach

Rock Island

Priest Rapids

McNary

The Dalles

Bonneville

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Role of the TMDL

- quantify the temperature problem;
- define the target temperatures;
- determine the level of improvement needed.

Role of the TMDL

- The TMDL establishes the temperature allocations along the river.
- It does not mandate that dams be removed or any other actions taken.
- The TMDL implementation plan will determine if there are feasible measures to achieve the TMDL.

Role of the TMDL

- If there are not feasible measures through operation, maintenance or possible modifications to the dam that will achieve the TMDL, the water quality standards can be amended by the state to reflect the improvement that can be attained.

Role of the TMDL

- The remainder of the impairment resulting from the dam would then be included in the TMDL as background allocation due to the existence of the dam.

Concerns Expressed

- Dams should be included in the TMDL as background;
- TMDL makes federal dam operators vulnerable to law suits;
- TMDL ignores uses of the river other than fish uses;

Concerns Expressed

- The Water Quality Standards of the 3 states and 2 tribes with jurisdiction are too complex;
- The Water Quality Standards are extreme and cannot be met.
- The data and modeling are insufficient;

TMDL Development Process

TMDL Policy Committee

- EPA, NMFS, ID, OR, WA, Tribes
- Meets monthly
- Federal Dam Operators and PUDs often attend

TMDL Technical Team

EPA, ID, OR, WA and Tribes

Meets as needed

Public Involvement

- Ten Public Workshops to share information and receive feed back;
- Monthly updates at the NMFS Water Quality Team Meetings;
- TMDL Web Page;
- Six Fact Sheets

Public Involvement

- Numerous Individual Meetings with Interest Groups
 - Federal Columbia River Power System;
 - Public Utility Districts;
 - Pulp and Paper Industry
 - Irrigation Districts
 - Watershed Council
 - Congressional Delegations

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For More Information

Region 10 Web Page:

www.epa.gov/r10earth/index.htm

Columbia/Snake Rivers TMDL Web Page:

www.epa.gov/r10earth/columbiainstemtmdl.htm